



## Astronaut Mike Foale holds new U.S. record for time in space

## ELV Program can boast near-perfect launch rate

▲ **ISS Update:** Expedition 8 Commander and NASA ISS Science Officer Mike Foale and Flight Engineer Alexander Kaleri last worked on scientific experiments ranging from behavior of plasma dust subjected to radio waves in a vacuum to investigation of stresses on the feet and legs during spaceflight.

Kaleri completed the first run of the Russian Plasma Crystal-3 experiment. The largely automated experiment studies crystallization of plasma dust subjected to high-frequency radio waves in a vacuum chamber.

Foale spent a day in instrumented biking tights for the Foot/Ground Reaction Forces During Spaceflight (FOOT) experiment. The Lower Extremity Monitoring Suit, the cycling tights outfitted with 20 sensors, measured forces on Foale's feet and joints and muscle activity while he went about his scheduled activities. Investigators believe the experiment will provide additional information on reasons for bone and muscle loss by people in space. That knowledge could lead to better ways to minimize such problems.

Monday, Foale surpassed the previous U.S. record in space, logging 230 days, 13 hours, three minutes and 37 seconds. Astronaut Carl Walz set the old record in June 2002. By the time Foale returns to Earth next April, he will have accrued 375 cumulative days in space.

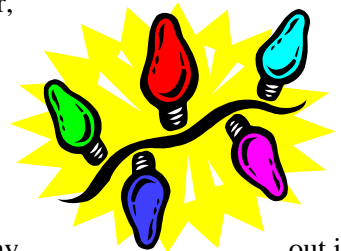
▲ **ELV Success:** A busy year of successful missions is drawing to a close for NASA's Expendable Launch Services. Since January, eight spacecraft have been safely and successfully deployed on expendable launch vehicles. Since 1987, when NASA began purchasing launch services, the agency's ELV success rate has been 98.5% (67 of 68 launches successful).

◆ **Reminder** – Tune in NASA TV at 9:30 a.m. tomorrow for CD Jim Kennedy's all hands meeting.

◆ **Oh, say, can you sing?** Auditions to sing the national anthem at KSC special events are being held Dec. 15 – 19 from 9 a.m. - 3:30 p.m. Auditions will be held at the Press Site – Bring your own music on a CD or sing a cappella. To sign up for time, please call Cheryl Johnson-Cox at 867-7820 or e-mail [Cheryl.M.Cox@nasa.gov](mailto:Cheryl.M.Cox@nasa.gov).

◆ **Energy Conservation** – It takes commitment from everyone at Spaceport to help KSC and CCAFS save energy dollars; therefore, please remember to:

- \* Turn off your computer, monitor, and printer (if not required to remain on).
- \* Turn off the lights in your office when you are the last person to leave.
- \* Turn off the hall and hall closet lights on your way out if you are the last person to leave your area in the building.
- \* Turn off displays and decorative lights.
- \* Turn off or unplug any appliances in the office, such as coffee makers, desk lamps, fans, radios, etc.
- \* Turn off the copier machines (including hallways) and scanners.
- \* Close the blinds on all windows.



◆ **Did You Know?** – Look west as night falls on Dec. 25 for a lovely pairing of brilliant Venus and the crescent moon. Read the full story at [http://science.nasa.gov/headlines/v2003/09dec\\_sunset.html](http://science.nasa.gov/headlines/v2003/09dec_sunset.html)

